

Rush

Work Order ID 134897

134897

Page 1

Item ID: 647.7703

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Strut Assembly

Start Date: 7/22/15 Start Qty: 2.00 *2*

Cust Item ID:

Required Date: 7/22/15 Req'd Qty: 2.00 *2*

Customer:

Reference:

Approvals: Process Plan: MLS Date: JUL 23 2015 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.7700	A

110 Pick Kit 0.00

110

Packaging Memo 0.00

Packaging

x2 15-08-14 MAL

120 Weld per dwg A/R 4130 rod Batch: M127925 0.00

120

Large Fab Memo 0.00

Large Fab 1- ASSEMBLE AND WELD AS PER DWG

***IMPORTANT DIMENSION IS 8.35" ***

x2 15-08-14 MAL

130 QC9- Inspect visual per QSI004- Fusion Welds 0.00

130

QC Memo 0.00

Quality Control

② 15-08-15

DAS
9
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval				
Description Work Order Deviation			Disposition					
						Completed By		
						Lead hand / Supervisor Approval Verification		
QC / QA Coordinator Approval								
Root Cause		FAULT CATEGORY						
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	Past Due ☐							

Work Order ID 134897

Wednesday, July 22, 2015 4:15:24 PM

134897

Page 2

Item ID: 647.7703 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Strut Assembly
 Start Date: 7/22/15 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 7/22/15 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC5- Inspect part completeness to step on W/O	0.00							
140									DAS
QC	Memo	0.00							9
Quality Control									9-89
150	Outsource process-Cadplate per QSI017 4.1.9.1	0.00							
150									
Outsource3	Memo	8.00							
Outsource process - Cad plate	Issue P/O : <u>29547</u> C of C is required								
160	Receive & Inspect for Damage & Mat'l Certs	0.00							
160									
Packaging	Memo	0.00							
Packaging									

2 1508-15 2 9 9-89

CY AUG 2 1 2015 2

2 DAS 6 9-89 AUG 3 1 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

134897

Page 3

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 7/22/15 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 7/22/15 **Req'd Qty:** 2.00 ***Q***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 134897

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Page 4

Item ID: 647.7703

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Strut Assembly

Start Date: 7/22/15

Start Qty: 2.00

2

Cust Item ID:

Required Date: 7/22/15

Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

Identify as per dwg & Stock Location: *Ship*

0.00

200

Packaging

Memo

0.00

Packaging

210

QC21- Final Inspection - Work Order Release

0.00

210

QC

Memo

0.00

Quality Control

15/6/1
MF
(5-8-31)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

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Page_

134897

647 7703

Start Date: 7/22/15**Required Date:** 7/22/15**Start Qty: 2.00**

Required Qty: 2.00

Comments: IPP REV:A 15.01.07 NEW ISSUE DD VERF:JLM

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
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Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04741

SHEET 1 OF 1

DWG NO. 647.7700

REV: NC

PREPARED BY J. SOTO

DATE: 11/13/2014

EFFECT ON DWG

☒ INC. ☐ UNINC.

DWG TITLE: STRUT ASSY

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

TRANSACTION CODES (TC):

A-ADD
R-REVISE

C-CREATE
D-DELETE

REASON: CREATED NEW CONFIGURATION. ADDED F/N 5.

134 897 MCT
1507-23

5	A	647.7714	1	STRUT TUBE	△1	
4	R	647.7713	1	STRUT THREAD	△3	△8
3	R	647.7712	1	STRUT TUBE	△2	
	C	647.7703	X	STRUT ASSY		
F/N	TC	PART NUMBER	.7703			
		QTY		DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED
☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO

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NOTES:

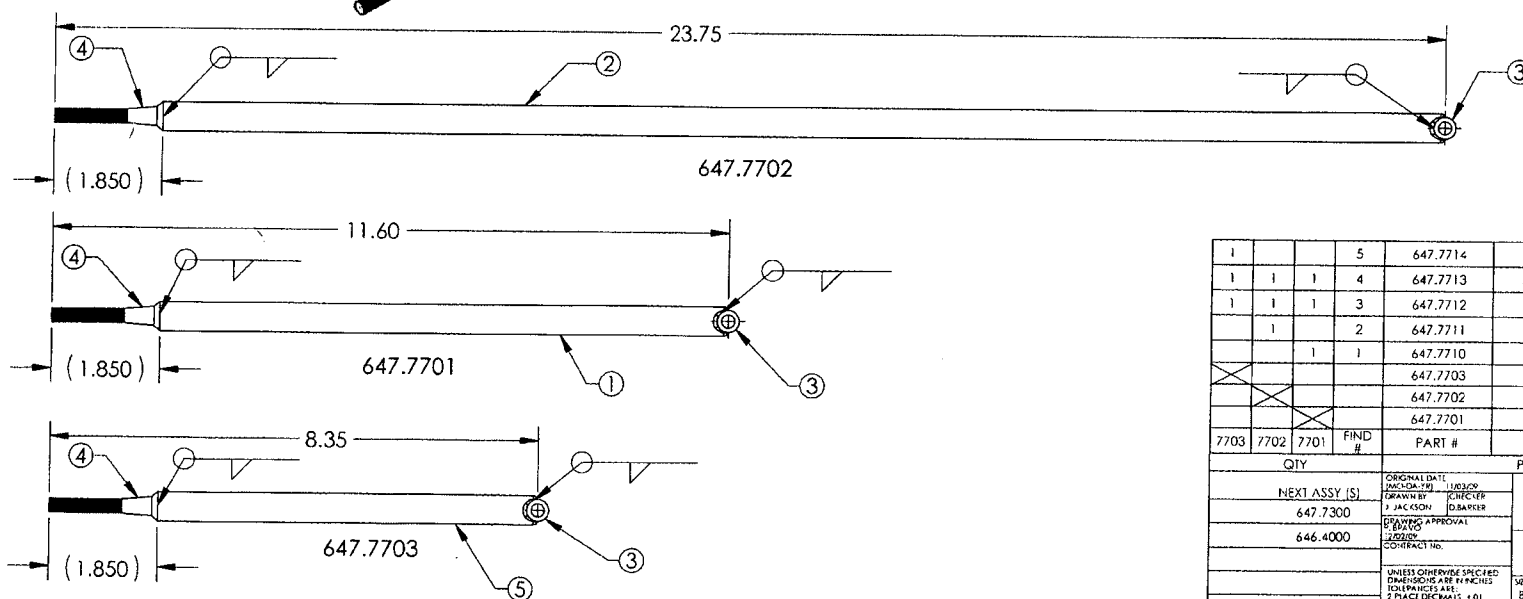
- 1 MATERIAL: 4130 STEEL PER AMS-T-6736, .50" OD, .083" WALL THK.
- 2 MATERIAL: 4130 STEEL PER AMS-T-6736, .375" OD, .075" WALL THK.
- 3 MATERIAL: 4130 STEEL PER AMS-T-6736, .324" OD.
- 4 FINISH: PRIME IAW MIL-P-2337J TYPE I CLASS N; 1-2 MIL MAX
- 5 DEBURR AND BREAK ALL SHARP EDGES
- 6 IDENTIFY IAW MPP-120.
- 7 WELD IAW MIL-STD-2219. TIG WELD WITH FILLER ROD
- 8 FINISH: CAD PLATE IAW MIL-C-5541 CLASS 1A
- 9 MASK THREAD PRIOR TO FINISH

REVISION			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION: P02		N/C
N/C	INITIAL RELEASE	12/07/09	P. BRAVO
A	W/INCORPORATED TECH DATA	11/12/11	P. BRAVO

647.7701

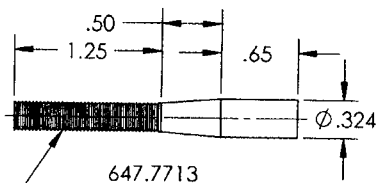
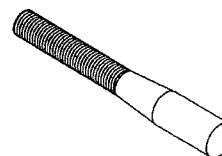
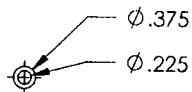
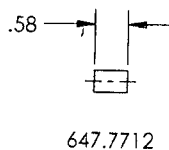
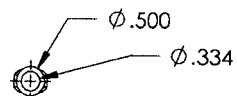
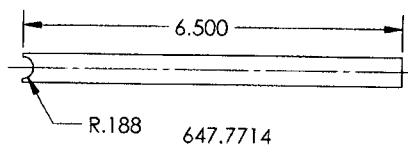
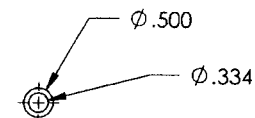
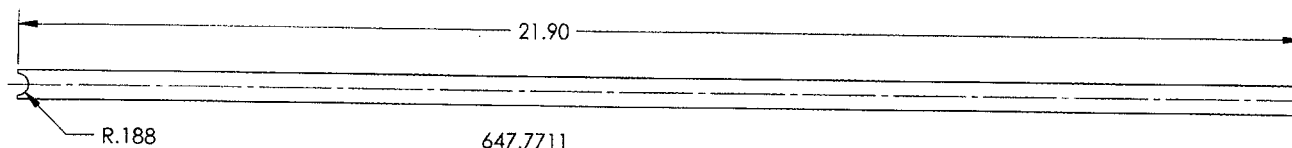
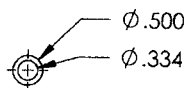
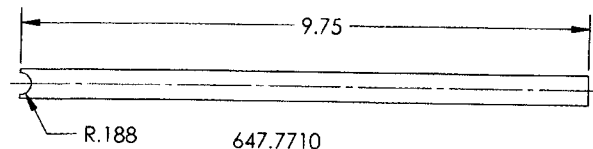
647.7703

647.7702



1	2	3	4	5	6	7	8	9
1	1	1	1	1	647.7714	STRUT TUBE	△	
1	1	1	1	1	647.7713	STRUT THREAD	△	△
1	1	1	1	1	647.7712	STRUT TUBE	△	
1	1	1	1	1	647.7711	STRUT TUBE	△	
1	1	1	1	1	647.7710	STRUT TUBE	△	
1	1	1	1	1	647.7703	STRUT ASSY	△△	
1	1	1	1	1	647.7702	STRUT ASSY	△△	
1	1	1	1	1	647.7701	STRUT ASSY	△△	
7703	7702	7701	FIND #	PART #	DESCRIPTION	MATL	SPEC.	
QTY								
NEXT ASSY (S)					ORIGINAL DATE	PARTS LIST		
647.7300					11/03/09	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
646.4000					12/07/09			
					12/07/09			
					12/07/09			
					UNLESS OTHERWISE SPECIFIED	STRUT ASSY SCALE: NONE SHEET 1 OF 2		
					DIMENSIONS ARE IN INCHES			
					3 PLACE DECIMALS ±.01			
					ANGLES ±.5°			

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1/4 - 28 THREAD

ORIGINAL DATE 11/03/00		APICAL INDUSTRIES	
DRAWN BY J. JACKSON		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL P. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT NO.		STRUT ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 2 OF 2	REV. A

Linda Lacelle

From: Pablo Bravo
Sent: Wednesday, February 04, 2015 12:39 PM
To: Linda Lacelle
Cc: Dave Barker; Jason Gardiner; Jean-Luc Menard; Chantal Lavoie
Subject: Re: wrong spec for P/O: 27284

That works for me.

Pablo

On Feb 4, 2015, at 6:32 PM, Linda Lacelle <llacelle@dartaero.com> wrote:

Our cad spec is Cad Plating is to be done per QQ-P-416F Class I Type II
Can we go ahead with this?

LL

From: Dave Barker
Sent: February-04-15 12:12 PM
To: Linda Lacelle; Pablo Bravo; Jason Gardiner
Cc: Jean-Luc Menard; Chantal Lavoie
Subject: RE: wrong spec for P/O: 27284

Should be Cad plating. The MIL spec should be updated.

Thanks,

Dave

From: Linda Lacelle [<mailto:llacelle@dartaero.com>]
Sent: Wednesday, February 04, 2015 8:12 AM
To: "David Barker" (dbarker@apicalindustries.com); Pablo Bravo
Cc: Jean-Luc Menard; Chantal Lavoie
Subject: FW: wrong spec for P/O: 27284
Importance: High

Hi guys,

The new part 647.7701/7702/7703, calls for cad plate, but the MIL spec is for alodine. Can you please confirm what the correct spec is? We have a rush order and our supplier is waiting...

Thx

Linda

From: Chantal Lavoie
Sent: February-04-15 11:09 AM
To: Linda Lacelle
Subject: FW: wrong spec for P/O: 27284

Hi Linda,
Order sent to Cadorth 647.7703 rush order, finish is not per dwg see below.
C

From: Shipping [<mailto:specialty@cadorth.com>]
Sent: Wednesday, February 04, 2015 10:36 AM
To: Chantal Lavoie
Subject: wrong spec for P/O: 27284

Hi Chantal,

You sent us 20 struts and it says to cadmium plate them. But the spec underneath where it says to cad plate is MIL-C-5541 CLASS 1A, which is a spec for chemical conversion.

If you can let me know what you would like done, if it is for cad, what is the type and class and what colour?

Thanks,
Nick



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO29547

Purchase Order Date 8/21/2015

PO Print Date 8/24/2015

Page Number 1 of 2

Order From :

GROUP ALTECH
2455 HALPERN

VC-ALT01

ST LAURENT, MONTREAL H4S 1N9

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Contact Name

Vendor Phone 514-355-3666

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
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1	134897	647.7703 STRUT ASSEMBLY	8/31/2015 Yes 8/31/2015		2.00	\$6.86	\$13.72
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Cad Plating is to be done per QQ-P-416F Class I Type II.

PLEASE NOTE: HYDROGEN ENDBRITALEMENT IS INCLUDED IN PRICING PER UNIT

Line Total: \$13.72

2	134113	D2711 LOCK PIN	8/31/2015 Yes 8/31/2015		41.00	\$6.86	\$281.28
---	--------	----------------	-------------------------------	--	-------	--------	----------

*15-8-28
56*

Cad Plating is to be done per QQ-P-416F Class I Type II.

PLEASE NOTE: HYDROGEN ENDBRITALEMENT IS INCLUDED IN PRICING PER UNIT

Line Total: \$281.28

Note:

8/24/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29547**

Purchase Order Date 8/21/2015

PO Print Date 8/24/2015

Page Number 2 of 2

Order From :

GROUP ALTECH
2455 HALPERN

ST LAURENT, MONTREAL H4S 1N9

VC-ALT01

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 514-355-3666

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

3	71401-45	PROCUREMENT QUALITY CLAUSES	8/31/2015	1.00	\$0.00	\$0.00
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No

Procurement Quality Clauses

8/31/2015

A004 FAA-PMA /TSO

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A024 PROCESS CERTIFICATIONS

A025 CERTIFICATE OF CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

Line Total: \$0.00

PO Total: \$295.00

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 2

Change Date: 8/24/2015

112010 /P



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

24 AUG 2015 PURCHASE ORDER
Purchase Order ID PO29547
Purchase Order Date 8/21/2015
PO Print Date 8/21/2015

Order From : VC-ALT01
GROUP ALTECH
2455 HALPERN
ST LAURENT, MONTREAL H4S 1N9

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	514-355-3666	Customer POID	
Ship To Contact		Customer Tax #	10127-2607
Ship To Phone		Terms	Net 30
Ship Via:	FedEx Overnight collect	Currency	CAD
Ship Acct:		FOB	Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	134897	647.7703 STRUT ASSEMBLY	8/31/2015 Yes 8/31/2015		2.00	\$6.86 6.86 ✓	\$13.72
	FINISH: CAD PLATE 1AW MIL-G-5541 CLASS-1A CAD YELLOW PER QQ-P-416F TYPE 2 CLS <i>sp</i>						Line Total: \$13.72
2	134113	D2711 LOCK PIN	8/31/2015 Yes 8/31/2015		41.00	\$6.86 Price in the system 3.78 ✓	\$281.28
	Cad Plating is to be done per QQ-P-416F Class I Type II.						Line Total: \$281.28

3 HYDROGEN
EMB BRITTLEMENT

CONTRACT REVIEW

☐ MANPOWER / TRAINING
☐ MATERIALS / LEAD TIME
☐ EQUIPMENT / CAPABILITIES
☐ QUALITY REQUIREMENTS
☐ RISKS

Q.A. DATE

\$120
Quote
7/27/15

Note:



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29547**

Purchase Order Date 8/21/2015

PO Print Date 8/21/2015

Page Number 1 of 2

Order From :

GROUP ALTECH
2455 HALPERN

ST LAURENT, MONTREAL H4S 1N9

VC-ALT01

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAKED

Contact Name

Vendor Phone 514-355-3666

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	134897	647.7703 STRUT ASSEMBLY	8/31/2015 Yes 8/31/2015		2.00	\$6.86	\$13.72
	FINISH: CAD PLATE IAW MIL-C-5541 CLASS 1A						
						Line Total:	\$13.72
2	134113	D2711 LOCK PIN	8/31/2015 Yes 8/31/2015		41.00	\$6.86	\$281.28
	Cad Plating is to be done per QQ-P-416F Class I Type II.						
						Line Total:	\$281.28

Handwritten: 15/08/15 SK

Note:

8/21/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29547**

Purchase Order Date 8/21/2015

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Page Number 2 of 2

Order From :

VC-ALT01

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ST LAURENT, MONTREAL H4S 1N9

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
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Contact Name

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514-355-3666

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

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Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

3	71401-45	PROCUREMENT QUALITY CLAUSES	8/31/2015	1.00	\$0.00	\$0.00
---	----------	--------------------------------	-----------	------	--------	--------

No

Procurement Quality Clauses

8/31/2015

A004 FAA-PMA /TSO

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A024 PROCESS CERTIFICATIONS

A025 CERTIFICATE OF CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

Line Total: \$0.00

PO Total: \$295.00

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 8/21/2015



Soumission / Quotation

2455, Halpern, Saint-Laurent, QUÉBEC, H4S 1N9
(514)335-3666
Fax: (514)335-3868
Internet: www.groupealtech.com

Soumission / Quote No: **007721**
Date: **23/08/2015**
Par / By: Joe Pelletier

Soumissionné pour / Quoted for
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY
ONTARIO, CANADA
K6A 1K7

Attention de / Attention to:

No. Fax: -
No. Tel: **613-63-2-5200**

Terms / Terms : NET30 Jours/Days

#	NoSerie / Part Number Nom Piece / Part Name	Traitement Process	U/M	Qté/Qty	Prix Price
1	D2711 LOCK PIN	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:3	UNIT	1	3.28
2	647.7701	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	UNIT	1	9.99
3	647.7702	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	UNIT	1	14.86
4	647.7703	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	UNIT	1	6.89
5	1.0T	HYDROGEN ENBRITALEMENT RELIEF (BAKE)	MIN-CH	1	120.00

Notes Additionnelles / Additional Notes

MIN CHARGES :
\$175.00 FOR CADMIUM
\$120.00 FOR HYDROEMBRIEMENT RELIEF (BAKE)

Soumission par / Quotation by
Joe Pelletier

Représentant Technique / Technical Representative

* Prix en devise Canadienne - Prices are in Canadian Funds
* TPS-TVQ non incluse - GST/PST not included

* Validation: 30 Jours / Days



2455, Halpern, Saint-Laurent, QUÉBEC, H4S 1N9
Tel.:(514)335-3666 Fax.:(514)335-3868
Internet : www.groupaltech.com

**Bon de livraison / Packing Slip
et / and
Certificat de conformité / Certificate of Compliance**

Bon-Livraison / Pk.Slip # : 112010-1 26/08/2015
Bon-Commande. / W.Order # : 112010
Client P.O. # : 29547
Transport :

Envoyé à / Ship to

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY
ONTARIO, CANADA K6A 1K7

Commandé par / Order by

DART AEROSPACE LTD (1427)
1270 ABERDEEN STREET
HAWKESBURY
ONTARIO, CANADA K6A 1K7

#	<u>No. Job</u> <u>No. Réf</u>	<u>NoSerie / Part Number</u> <u>Nom Produit / Product</u>	<u>Traitement</u> <u>Process</u>	<u>Poids</u> <u>Weight</u>	<u>Qté</u> <u>Qty</u>	<u>Envoyé</u> <u>Sent</u>	<u>A venir</u> <u>BO</u>
1	UNIT	647.7703 Rev.	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	0.00	2	2 /	0
2	UNIT	D2711 Rev. LOCK PIN	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	0.00	41	41 /	0
3	MIN-CH	D2711 Rev.	HYDROGEN ENBRITAMENT RELIEF (BAKE)	0.00	1	1 /	0

15/81
54

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

AD

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
Our financial and legal responsibility will not be higher than the amount of invoice.